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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,271	06/15/2001	George M. Kauffman	81537A	7880

7590 06/19/2003

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EXAMINER

DEMAKIS, JAMES A

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/882,271

Applicant(s)

KAUFFMAN, GEORGE M.

Examiner

James A Demakis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-20 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).
2. The disclosure is objected to because of the following informalities: Sheet 15, lines 21-23, refers to equating the ID and OD to the characteristic impedance. These are obviously different dimensions: ohms vs. inches. Please correct, it's clearly not what was intended. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-4,6-8,10,16-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Kawanami et al (USPN 4544984).

Regarding Claims 1-4,6-8,10,16-20:

Kawanami et al discloses a coaxial lightning arresting device and structure for use in protecting coaxial transmission lines and like structures, which contains: an outer conductor 21 connected to and supported by metallic coaxial female connector portions 22 at opposite ends of the outer conductor and including a circular through hole 23, a thin or elongated inner conductor 24 that is located to coaxially extend through the hole 23 of the outer conductor 21 and

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is supported at each end by one of the connector portions 22 via cylindrical or spool shaped dielectric members 25 that act as a support and separator, a gas filled arrester tube or GDT 6 is positioned on the inner conductor 24 with the lower electrode 7 electrically connected and the upper electrode 8 electrically connected to the outer conductor 21 mechanically through a spring washer 29 and a conductive cap 30, see Figures 4 and 5.

Additionally, Kawanami et al discloses a device with an arrester unit comprising a pair of arresters such that it can be used for a two-conductor transmission line, see Figure 2 and Col. 1, lines 27-31.

The impedance of the various portions of the coaxial structure, center or arrester section and connector sections, are adjustable or tuneable via the screw cap 30, which effectively changes the capacitance and inductance of the coaxial structure. Also, dimensional changes to inner and outer conductors can change the characteristic impedances; see Col. 2, lines 10-68; Col. 3, lines 1-25; and Col. 4, lines 49-68.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawanami et al in view of Chaudhry et al (USPN 5768084) and Pagliuca (USPN 5953195).

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Regarding Claims 5, 11-15:

Kawanami et al teaches all that is claimed, as discussed in the above rejection of claims 1-4, 6-8, 10, 16-20 except for the use of male connectors and an elongated center pin with a uniform diameter throughout.

Chaudhry et al discloses a coaxial surge arrester with various insulator and connector configurations including male connectors, see Figure 33 and Col. 13, lines 20-25, and an elongated, uniform center conductor, see Figure 30; and several different insulator configurations 204, 410, 430, and 416.

It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Kawanami et al by the teachings of Chaudhry et al to use male or “female” connectors as the choice of coaxial connectors interchangeably in a design.

Pagliuca discloses the use of an elongated pin, uniform in cross-sectional diameter throughout its entire length 26, Figure 2.

It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Kawanami et al by the teachings of Pagliuca to include a center pin of uniform diameter to provide a consistent transmission path with minimal return loss when mated to a coaxial cable.

Allowable Subject Matter

7. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, in general, discloses sealing rings or o-rings to retain the assembly at the ends of the connector interfaces; see Pagliuca, Figures 1 and 2, item no. 68; o-rings within the internal structure were not disclosed..

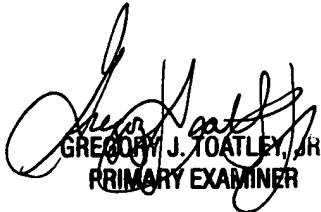
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A Demakis whose telephone number is 703.305.7938. The examiner can normally be reached on 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703.308.3119. The fax phone numbers for the organization where this application or proceeding is assigned are 703.308.7721 for regular communications and 703.308.7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0956.

James A. Demakis
June 16, 2003


GREGORY J. TOATLEY, JR.
PRIMARY EXAMINER